

Topic 9: *Sleep/Rest for Older Adults*

Competencies

- 1.** Describe the normal changes in sleep patterns associated with age.
- 2.** Identify the causes of sleep disturbance among older adults.
- 3.** Assess sleep in older adults.
- 4.** Provide nursing interventions to restore sleep quality among older adults.



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Content Outline

1. Describe the normal changes in sleep patterns associated with age.

The elderly experience an increase in stage one wakefulness after onset of sleep, and a decrease in slow wave sleep.

With age, more time is spent awake in bed because of frequent sleep interruptions.

Frequent arousals reduce the amount of nocturnal sleep. However, napping during the daytime may actually increase the total sleep time over a 24-hour period.

Sleep complaints in older adults include difficulty falling asleep, sleep interruptions, and daytime fatigue.

Some of the changes in sleep patterns of older adults are likely caused by changes in circadian rhythm.

2. Identify the causes of sleep disturbance among older adults.

Sleep disturbance may result from one or from multiple causes.

The American Sleep Disorders Association classifies sleep disturbances into four categories: (1) dyssomnias (disorders of initiating and maintaining sleep and of excessive sleepiness); (2) parasomnias (disorders that primarily do not cause sleep-related complaints); (3) disorders associated with medical or psychiatric disorders; and (4) proposed sleep disorders (disorders that continue to be studied, in an effort to make them better defined).



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Content Outline

Periodic limb movements in sleep (PLMS) and sleep-related breathing disorders, including apnea and hypopnea, may cause sleep arousals. However, older adults with these conditions often do not recognize that the conditions are disturbing sleep.

The onset of acute illness or the progression of chronic illness may cause sleep disorders.

Pain caused by arthritis, fractures, cancer, or other conditions may manifest in sleep delay or disruption.

Commonly occurring problems of older adults—including nocturia, dementia, alcoholism, and depression—are known causes of sleep disturbance.

3. Assess sleep in older adults.

Four areas of assessment are to be addressed concerning sleep disorders: (1) sleep history, (2) medical history, (3) diet and drug history, and (4) psychosocial history.

The sleep history should include the impact of the sleep complaint on the individual's daily life. Obtaining a 24-hour sleep diary over the course of a week or two can help identify the daily sleep pattern. The observations of bedpartners or caregivers are important contributions to the sleep history.

It is necessary to obtain a thorough medical history in the assessment of a sleep complaint. Various medical conditions may contribute to sleep disturbances.



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A drug history that includes prescription and nonprescription medications, as well as alcohol, caffeine, and nicotine, is essential to the sleep assessment.

A psychosocial history should first begin with psychiatric illnesses, such as anxiety, depression and dementia. This should be followed by a social history that includes experiences such as grieving the illness or loss of friends and family, and translocation.

4. Provide nursing interventions to restore sleep quality among older adults.

Treatment for sleep-related disorders in the elderly includes both nonpharmacologic and pharmacologic options.

Individuals who are identified as having PLMS or sleep-related breathing disorder should be referred for further assessment and treatment.

The first line of treatment in all sleep-related disorders is to remove the suspected contributing factors. If symptoms are related to a medical illness, that illness should be treated. Drugs identified as likely to be interfering with sleep should be reassessed and, if possible, changed after consultation with the individual's physician. If sleep assessment identifies alcohol, caffeine, or nicotine use as possible causes of sleep disorder, counseling about smoking cessation and alcohol intake must be offered to these individuals. Decreasing caffeine and fluid intake late in the day may help promote sleep. Reducing fluid intake in the evening can help reduce the need to void during the night.



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Content Outline

Develop a sleep-preparation routine—including changing into night clothes, washing face and teeth, and going to the bathroom immediately before bedtime. A consistent bedtime should be established. The bedroom should be used for sleep only. Other daily activities should be carried out in another room, if possible. Developing a sleep story that the older adult can think about once he or she enters the bed may promote a restful state of mind. Frequent daytime napping should be discouraged. A daily exercise routine, depending on physical ability, should be developed.

Pharmacologic intervention is recommended for the elderly for short-term use only. When necessary, a benzodiazepine with a short or intermediate action is suggested. Temazepam and Triazolam, two drugs of this class, have good effects at low doses and fewer potential side effects than longer acting drugs. A two-week maximum time period should be observed to avoid dependence on these sleep aids.



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Instrument/Scales

PITTSBURGH SLEEP QUALITY INDEX (PSQI)

Instructions: The following questions relate to your usual sleep habits during the past month only. Your answers should indicate the most accurate reply for the majority of days and nights in the past month. Please answer all questions.

During the past month,

1. When have you usually gone to bed? _____
2. How long (in minutes) has it taken you to fall asleep each night? _____
3. When have you usually gotten up in the morning? _____
4. How many hours of actual sleep did you get that night? (This may be different than the number of hours you spend in bed) _____

5. During the past month, how often have you had trouble sleeping because you...	Not during the past month (0)	Less than once a week (1)	Once or twice a week (2)	Three or more times a week (3)
a. Cannot get to sleep within 30 minutes				
b. Wake up in the middle of the night or early morning				
c. Have to get up to use the bathroom				
d. Cannot breathe comfortably				
e. Cough or snore loudly				
f. Feel too cold				
g. Feel too hot				
h. Have bad dreams				
i. Have pain				
j. Other reason(s), please describe, including how often you have had trouble sleeping because of this reason(s):				
6. During the past month, how often have you taken medicine (prescribed or "over the counter") to help you sleep?				
7. During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?				
8. During the past month, how much of a problem has it been for you to keep up enthusiasm to get things done?				
	Very good (0)	Fairly good (1)	Fairly bad (2)	Very bad (3)
9. During the past month, how would you rate your sleep quality overall?				

- Component 1** #9 Score C1 _____
- Component 2** #2 Score (≤ 15 min (0), 16-30 min (1), 31-60 min (2), >60 min (3))
+ #5a Score (if sum is equal 0=0; 1-2=1; 3-4=2; 5-6=3) C2 _____
- Component 3** #4 Score (>7 (0), 6-7(1), 5-6(2), ≤ 5 (3) C3 _____
- Component 4** (total # of hours asleep)/(total # of hours in bed) $\times 100$
 $>85\%=0$, $75\%-84\%=1$, $65\%-74\%=2$, $\leq 65\%=3$ C4 _____
- Component 5** # sum of scores 5b to 5j (0=0; 1-9=1; 10-18=2; 19-27=3) C5 _____
- Component 6** #6 Score C6 _____
- Component 7** #7 score + #8 score (0=0; 1-2=1; 3-4=2; 5-6=3) C7 _____

Add the seven component scores together _____ **Global PSQI Score** _____

Reprinted from *Journal of Psychiatric Research*, Vol. 28, No. 2, Buysse, D. J., Reynolds III, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J., The Pittsburgh Sleep Quality Index: A New Instrument for Psychiatric Practice and Research, pp. 193-213, Copyright 1989, with permission from Elsevier Science.



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Case Study

Ms. R is a 79-year-old woman who lives with her husband in their own home. She is taking medication for hypertension, but has no other medical problems. She had one daughter who passed away five years ago with lung cancer. Three weeks ago, at her urging, Ms. R.'s husband participated in a free prostate cancer screening at the local senior center and was diagnosed with the disease. He is scheduled for surgery next week.

Over the past several weeks, Ms. R has been seen at the senior center, falling asleep in the middle of the morning and again in the afternoon. Many of the seniors have commented that this is not a place to sleep and have reported Ms. R's condition to the director.

The nurse for the center made a home visit one afternoon and interviewed Ms. R about her frequent napping at the center. On assessment, Ms. R revealed that she had not been sleeping well at night. She stated that it took her about two hours to fall asleep. She usually woke up about 2:00 A.M. and stayed awake until 5:00 A.M. She finally managed to fall back to sleep until her husband awakened her at 6:30 A.M. for attendance at morning Mass. She admitted that, when she told her physician, he prescribed her a "little purple pill," but she didn't want to take it. Further assessment revealed that Ms. R was very upset about her husband's impending surgery. She cried when she discussed the possibility of losing him and being alone in the world.

On review of the assessment, the nurse found no medical or pharmacological reason for Ms. R's insomnia. It appeared that her sleep disorder was most likely related to her anxiety over her husband's impending surgery. The nurse provided Ms. R with education about her husband's surgery. This helped Ms. R to gain some control over the future events. In addition, the nurse instructed Ms. R to avoid napping during the day and to add a program of physical exercise to her daily routine. Ms. R was assured that the low dose of Halcion prescribed for her was safe for a period of two weeks. The nurse requested the staff and other visitors at the senior center to take frequent opportunities to discuss Ms. R's feelings of fear and loneliness, and scheduled an appointment for re-assessment of Ms. R in two weeks.



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When the nurse made her follow-up visit, Ms. R revealed that her husband was home recovering well from the surgery. She no longer had problems sleeping, and she had discontinued the sleep-inducing medication two days after her husband's return.



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Experiential Activities/ Clinical Experiences

1. Perform a sleep assessment using the Pittsburgh Sleep Quality Index.
2. Write a nursing diagnosis based on the sleep assessment.
3. Review a patient's chart and develop a plan of care using first nonpharmacological and then, if necessary, pharmacological treatments for sleep.
4. Review the side effects of each sleep medication and to incorporate, into the plan of care, interventions to assess, prevent, and treat side effects.
5. Evaluate the effectiveness of the plan of care, using the initial sleep assessment.



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Evaluation Strategies

A. *True/False*

False

1. Older adults require less sleep than younger people do.

True

2. One of the most frequent sleep complaints among older adults is sleep interruption at night.

True

3. Chronic and acute medical illnesses are more frequent in older adults and are often the cause of sleep disorders.

True

4. A sleep assessment includes: sleep, medical, drug, diet, and psychosocial histories.

False

5. The first line of intervention for sleep disorders is pharmacological treatment.

B. *Clinical Evaluation:* Because sleep disturbance is common among older adults, minimum competency includes an assessment of sleep among all older clients. For those with sleep disorders, development of a plan of care should begin with a nursing diagnosis. Nonpharmacological and, if necessary, pharmacological interventions may follow.



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Resources

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